How to Install a Blum AVENTOS HK-S Stay Lift

Doors, Drawers & Fronts. US catalog, in inches and millimeters. Updated November 2026.

The AVENTOS HK-S is Blum's compact stay lift for a lift-up door on a small or shallow wall cabinet: two lift mechanisms, one on each cabinet side, locate on two pins and three screws. This guide shows how to pick the set by power factor, the parts to order by Blum part number, the pin and screw positions and the steps in order, for cabinets from 186 mm (about 7-11/32 in) to 610 mm (about 24 in) high.

AVENTOS HK-S at a glance

Cabinet Height	From 186 mm (about 7-11/32 in) to 610 mm (about 24 in) outside height, up to 1828 mm (about 71-15/16 in) outside width
Inside Size	Inside height at least 150 mm (about 5-29/32 in), inside depth at least 163 mm (about 6-7/16 in), or 240 mm (about 9-15/32 in) with a visible wall hanging bracket
Sizing	Power factor = cabinet height (in) x door weight including double handle weight (lb)
Opening Angle	107 degrees, with optional stops at 100 and 75 degrees
Cabinet Side	Two locating pins and three wood screws Ø4 x 35 per mechanism
Options	TIP-ON fits the HK-S

From Blum AVENTOS catalog p.9, 50, 47, 49.

Who this guide is for

A homeowner or small workshop hanging a lift-up door on a small or shallow wall cabinet from 186 mm (about 7-11/32 in) to 610 mm (about 24 in) high. The HK-S needs an inside depth of at least 163 mm (about 6-7/16 in) and an inside height of at least 150 mm (about 5-29/32 in).

What you need

Order one lift set by power factor, and the door mounting plates for your door.

Blum Part Number	What It Is	How Many	Your Choice
20K2B00.06, 20K2C00.06, 20K2E00.06	AVENTOS HK-S lift set, chosen by power factor: 2 lift mechanisms, covers, 2 branding elements and wood screws Ø4 x 35 (qty 6)	1 set	Dark gray (TGR), Silk white (SW) or Light gray (HGR)
175H3100	Door mounting plate, screw-on, for wooden doors and wide aluminum frames	1 per lift mechanism; see the maker's instructions	
177H3100E	Door mounting plate, EXPANDO	in place of 175H3100	
177H3100	Door mounting plate, knock-in	in place of 175H3100	
175H3F00	Door mounting plate with bracket for large overlay five-piece doors	in place of 175H3100	
20K4A00A02	Door mounting plate set for narrow aluminum frames	in place of 175H3100	

20K7A41	Opening angle stop, 100 degrees, dark gray (TGR)	Optional: see the maker's instructions	
20K7A11	Opening angle stop, 75 degrees, dust gray (R7037)	Optional: see the maker's instructions	
20K6A01	Frame mounting bracket set for a face frame cabinet: M4 x 30 lift mounting screws, qty 12	1 set, for a face frame cabinet	

From Blum AVENTOS catalog p.47, 48, 49, 64. Finishes and colors are your choice; the table names them as Blum prints them.

Blum notes that the smallest set, 20K2B00, holds one unsprung mechanism with no tension adjustment and one sprung mechanism. The TIP-ON version of each set ends in T: see the TIP-ON guide.

Jigs and tools that make it easier

Blum's catalog shows a universal individual template for the lift's cabinet side, and the two locating pins of the HK-S need holes there. These jigs help when you work by hand.

Blum Part Number	Jig or Tool	What It Does Here
65.1051.02	Universal individual template, with the 5 mm (about 3/16 in) drill bit DB-5mm	Marks and guides the two locating pin holes and the screw positions in the cabinet side.
ZML.0040.02	Universal drilling template	Marks and drills the front fixing positions on the door.
#2 POZI DRIVER	#2 POZI driver, or POZI BIT #2X2 in a screw gun with a BIT HOLDER	Blum says a POZI screwdriver, which is different from a Phillips, is the most crucial tool to make sure full torque reaches the mounting screws. It sets the tension and the cams.

From Blum AVENTOS overview p.1; Blum AVENTOS catalog p.67.

If you cut on a CNC router, you can drill these same positions from your own cut file, so the jigs here are for building by hand.

Sizing, space and limits

The HK-S is picked by power factor, from the cabinet height and the door weight. Blum counts the handle weight twice.

Power factor

`Power factor = cabinet height (in) x door weight including double handle weight (lb)`
Cabinet height in inches. Door weight and handle weight in pounds. The handle weight is counted twice, as Blum prints.

From Blum AVENTOS catalog p.47.

Clearance for a cornice or crown molding, with no opening angle stop

`Y = FH x 0.29 - 15 + FD`
FH is the door height and FD the door thickness, in millimeters. Blum's table heads this row Unsprung.

From Blum AVENTOS catalog p.51.

With the 100 degree stop

`Y = FH x 0.17 - 15 + FD`
From Blum AVENTOS catalog p.51.

With the 75 degree stop

`A = FH x 0.26 + 15 - FD`
From Blum AVENTOS catalog p.51.

Power Factor Ranges

Part Number	Power Factor From	Power Factor to	Opening Angle
20K2B00.06	19	44	107 degrees
20K2C00.06	35	88	107 degrees
20K2E00.06	84	195	107 degrees

Blum prints no inclusive or exclusive word for the end of a range, so read each range as running from its first figure to its second, and do a trial application near either end. From Blum AVENTOS catalog p.47.

Cornice Clearance X by Door Thickness FD

Door Thickness FD	X
16 mm (about 5/8 in)	70 mm (about 2-3/4 in)
19 mm (about 3/4 in)	59 mm (about 2-5/16 in)
22 mm (about 7/8 in)	49 mm (about 1-15/16 in)
26 mm (about 1-1/32 in)	35 mm (about 1-3/8 in)

From Blum AVENTOS catalog p.51.

Blum recommends the more powerful lift mechanism for applications in overlapping ranges, and a trial application when you are in a borderline area of a mechanism's power factor range.

Blum prints: "The power factor can be increased by 50% if you use a third lift mechanism."

The minimum gap (MF) between doors is 2 mm (about 3/32 in), and the top panel thickness SOB for the pin drawing is 22 mm (about 27/32 in) at most.

Worked example. A cabinet 15 in high and 30 in wide

The door weighs 3.2 lb and the pull weighs 0.2 lb.

1. The pull counts twice: 2 x 0.2 = 0.4 lb

2. Door weight including double handle weight = 3.2 + 0.4 = 3.6 lb

3. Power factor = 15 x 3.6 = 54

4. 20K2B00.06 ends at 44, 20K2C00.06 runs from 35 to 88 and 20K2E00.06 starts at 84, so only 20K2C00.06 holds 54.

Order lift set 20K2C00.06 and door mounting plates 175H3100, one for each lift mechanism.

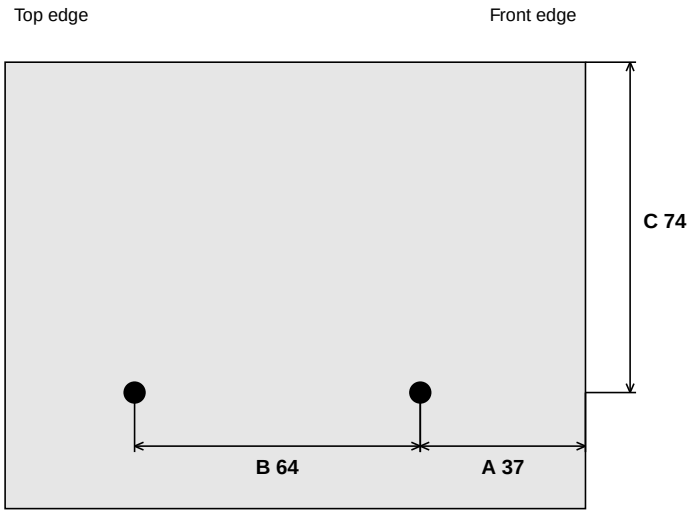
Where two ranges overlap, Blum recommends the more powerful mechanism.

From Blum AVENTOS catalog p.47.

Drawings and positions

Every drawing below is ours, drawn to scale from the figures Blum prints and named with its source page. The letter on a dimension line points to the table under the drawing.

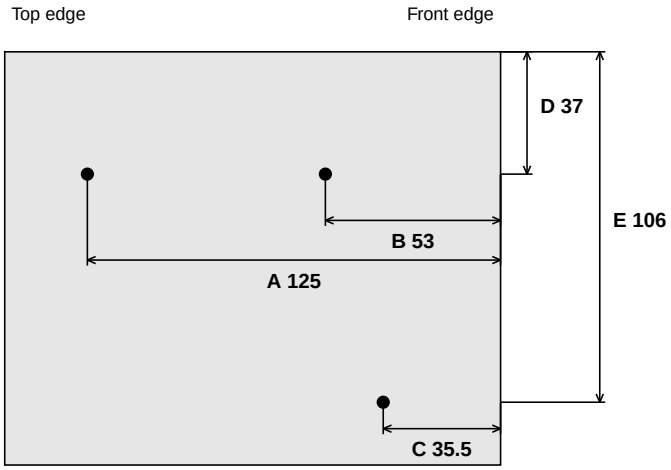
Locating pin holes in the cabinet side



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.50. Two holes, Ø5 mm (about 3/16 in) and at least 5 mm (about 7/32 in) deep, in a row 74 mm (about 2-29/32 in) below the cabinet top, the top face of the top panel, measured from the front edge back. On a cabinet whose top panel sits on the sides, take the top panel's thickness off to measure from the side's top edge. The top panel is at most 22 mm (about 27/32 in) thick.

Letter	Figure	In Inches	What It Measures
A	37 mm	about 1-15/32 in	Front edge to the first pin hole
B	64 mm	about 2-17/32 in	First pin hole to the second
C	74 mm	about 2-29/32 in	Top edge down to the row of pin holes

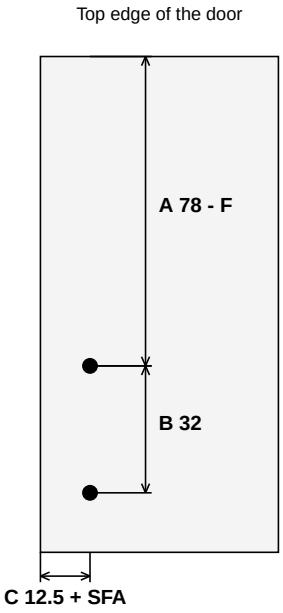
The three fixing screws in the cabinet side



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.50. Three wood screws Ø4 x 35 for each mechanism. Every figure is measured from the front edge, or down from the cabinet top, the top face of the top panel. On a cabinet whose top panel sits on the sides, take the top panel's thickness off to measure from the side's top edge.

Letter	Figure	In Inches	What It Measures
A	125 mm	about 4-29/32 in	Front edge to the rearmost screw
B	53 mm	about 2-3/32 in	Front edge to the middle screw
C	35.5 mm	about 1-13/32 in	Front edge to the lowest screw
D	37 mm	about 1-15/32 in	Top edge down to the upper two screws
E	106 mm	about 4-3/16 in	Top edge down to the lowest screw

The door plate screw holes



Drawn by CabDesign after Blum AVENTOS catalog cme106254, p.51, for wooden doors and wide aluminum frames, with the gap F and the side overlay SFA drawn as zero. Narrow aluminum frames use a different pattern: use door mounting plate set 20K4A00A02 and follow Blum's page 51.

Letter	Figure	In Inches	What It Measures
A	78 mm - F	about 3-1/16 in - F	Top edge of the door to the upper hole, less the gap F
B	32 mm	about 1-1/4 in	Upper hole to the lower hole
C	12.5 mm + SFA	about 1/2 in + SFA	Side edge of the door to the holes, plus the side door overlay

Steps, in order

1. Pick the set by power factor. Multiply the cabinet height in inches by the door weight in pounds, counting the handle weight twice, and choose the set whose range holds the answer. Where two ranges overlap, choose the more powerful set.

2. Check the space. The inside height is at least 150 mm (about 5-29/32 in) and the inside depth at least 163 mm (about 6-7/16 in), or 240 mm (about 9-15/32 in) with a visible wall hanging bracket. The cabinet is at most 610 mm (about 24 in) high. Check the cornice clearance with the formulas above.

3. Prepare a face frame cabinet. On a face frame cabinet, block the frame out flush and use frame mounting bracket set 20K6A01, which needs a recess of at least 12.5 mm (about 1/2 in).

4. Bore the locating pin holes. In each cabinet side drill the two Ø5 mm (about 3/16 in) pin holes at least 5 mm (about 7/32 in) deep, at the positions in the first drawing. Template 65.1051.02 helps.

5. Fit the lift mechanisms. Seat each mechanism on its two locating pins and fix it with three wood screws Ø4 x 35 at the positions in the second drawing.

6. Fit the door plates. Fix the door mounting plates to the back of the door at the positions in the third drawing, with two wood screws (606N or 606P) per side.

7. Fit the opening angle stops, if you use them. Stop 20K7A41 limits the opening to 100 degrees and 20K7A11 to 75 degrees. Fit them as Blum's instruction sheet shows.

8. Raise the arm with caution. Stand at arm's length and raise the arm. Blum says not to remove the plastic tab until just before attaching the door, and not to push the arm down or leave it down.

9. Clip on the door. Click the CLIP mechanism of each arm onto its door plate.

10. Set the tension. Use a POZI driver, or a POZI bit in a screw gun, on the tension adjustment until the door balances.

11. Make the three adjustments and snap on the covers. With the POZI driver adjust the door's side, depth and height cams, plus or minus 2 mm (about 3/32 in) each, then snap on the cover plates.

12. Remove the mechanism before moving the cabinet. Blum says to remove the mechanism before installing or removing the cabinet.

Check before you finish

- Each mechanism sits on both locating pins and has all three screws.
- The door balances, and both mechanisms have the same tension.
- The gap between neighboring doors is at least 2 mm (about 3/32 in).
- The open door clears a cornice or crown molding by the clearance formula for the stop you use.
- The three door adjustments are within plus or minus 2 mm (about 3/32 in) each.

Common mistakes

- Measuring the HK-S from the wrong top. The HK-S is measured from the cabinet top, the top face of the top panel, not from its underside as the other AVENTOS lifts are. On a cabinet whose top panel sits on the sides, that top is one top-panel thickness above the side's top edge.
- Pushing the arm down or leaving it down. Blum's instruction sheet says not to push the arm assembly down or leave it in the down position.
- Removing the plastic tab too early. Blum says not to remove the plastic tab until just before attaching the door.
- Moving the cabinet with the mechanism fitted. Blum says to remove the mechanism before installing or removing the cabinet.
- A Phillips driver on the cams. Blum calls a POZI driver the most crucial tool to make sure full torque reaches the mounting screws.
- Power factors from an older instruction sheet. Blum's older HK-S instruction sheet carries older power factor ranges and part numbers. Use the ranges in the table above, from the 2026 catalog.
- A face frame cabinet with no block-out or bracket. Blum's catalog shows the frame blocked out flush with frame mounting bracket set 20K6A01.

From Blum AVENTOS catalog p.50, 67, 47, 64; Blum HK-S instructions.

Check your numbers: Enter your cabinet and door in inches or millimeters, and the Blum AVENTOS Calculator gives the part, its power factor and every hole, each cabinet figure measured from Blum's own line and from the side's top edge. Open the Blum AVENTOS Calculator at cabdesign.app/modules/blum-aventos-calculator/blum-aventos-calculator.

What Blum's sheet decides

These details are not published in the Blum documents this guide is written from, so this guide leaves them out. Read them on Blum's own sheet for your part.

- The size of a pilot hole for the door screws: Blum prints only the screw part numbers.
- How many opening angle stops one cabinet takes: Blum's catalog prints the angle, the color and the part number only.

Frequently asked questions

How do I pick an AVENTOS HK-S lift?

Multiply the cabinet height in inches by the door weight in pounds, counting the handle weight twice, and choose the set whose power factor range holds the answer: 20K2B00.06 from 19 to 44, 20K2C00.06 from 35 to 88 or 20K2E00.06 from 84 to 195. Where two ranges overlap, Blum recommends the more powerful lift mechanism.

What size cabinet does the HK-S need?

An inside depth of at least 163 mm (about 6-7/16 in), or 240 mm (about 9-15/32 in) with a visible wall hanging bracket, and an inside height of at least 150 mm (about 5-29/32 in), in a cabinet up to 610 mm (about 24 in) high.

How far apart are the HK-S locating pins?

The two Ø5 mm (about 3/16 in) holes are in a row 74 mm (about 2-29/32 in) below the cabinet top, the top face of the top panel: the first is 37 mm (about 1-15/32 in) from the front edge and the second 64 mm (about 2-17/32 in) further back.

How many screws hold each HK-S mechanism?

Three wood screws Ø4 x 35. The set includes six for the two mechanisms.

Does the HK-S take TIP-ON?

Yes. Each set has a TIP-ON version whose part number ends in T. See the TIP-ON guide.

What is the opening angle of the HK-S?

107 degrees. Optional stops limit it to 100 degrees (20K7A41) or 75 degrees (20K7A11).

How CabDesign picks and sizes this

CabDesign sizes a lift-up front on the AVENTOS HK-S from the same printed Blum tables used in this guide. It reads the cabinet height, the door weight and the pull weight, counts the pull twice, picks the lift set and puts its part numbers, and the door mounting plates, on the project's buy list.

Size it the same way in the Designer: pick a lift-up front, enter the door weight, and the Designer reads the same printed tables. Open the Designer at cabdesign.app.

Keep reading

- How to Install a Blum AVENTOS HK Top Stay Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hk-top

- How to Install a Blum AVENTOS HK-XS Lift With Hinges: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hk-xs

- How to Fit Blum TIP-ON to an AVENTOS Stay Lift: cabdesign.app/guides/doors-drawers-fronts/install-blum-tip-on-aventos

- Cabinet Door Overlay and Reveals, Explained: cabdesign.app/guides/doors-drawers-fronts/door-overlay-and-reveals-explained

Sources and references

- Blum AVENTOS catalog cme106254, LIT.AVT1001.08.26, blum.com/file/cme106254_ep_dok_bus (ranges, part numbers and drawings)

- Blum AVENTOS program overview cme115842, blum.com/file/cme115842_td_dok_bus (templates for each lift)

- Blum AVENTOS HK-S assembly instructions, blum.com/aventos-hks-assembly (the order of assembly and the arm warnings)

AVENTOS, SERVO-DRIVE, TIP-ON and BLUMOTION are names of Blum. This guide is independent: it is written by CabDesign and Blum has not reviewed it.

Blum's own instructions win if they differ, and Blum may change its parts without notice.

A CabDesign guide. This guide on the web: cabdesign.app/guides/doors-drawers-fronts/install-blum-aventos-hk-s